

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Gulf Coast Hurricanes¹ Situation Report #2
September 25, 2005 (3:00 PM EDT)

HIGHLIGHTS

- Currently, 1,508,380 customers are without electric power in Texas, Louisiana, Arkansas, and Mississippi. This includes new customer outages due to Hurricane Rita as well as outages remaining from Hurricane Katrina.
- Entergy is assessing the impact of Rita on expected restoration completion dates in the greater New Orleans area and will issue new projections late today or tomorrow.
- According to ExxonMobil, the company is identifying priority service stations along primary evacuation routes which they will begin to open based on personnel and product availability. The company is re-supplying Houston stations in addition to providing extra fuel to San Antonio, Dallas and Austin markets to assist evacuees who are returning home. ExxonMobil continues to supply fuel to first responders throughout Texas and Louisiana.
- Shell has also announced that it continues to re-supply fuel to the Houston area with the focus on evacuation routes. On Saturday, Shell and Motiva re-opened the North Houston and Pasadena distribution terminals.
- ESF-12 in Texas is supporting efforts to aid refineries in the Port Arthur area. ESF-12 has assisted companies in obtaining clearances for repair and maintenance work. ESF-12 is also working with the electric utilities to expedite power restoration to the refinery industry.
- DOE participated with other agencies in supporting development of a strategy for prepositioning fuel to support Hurricane Rita first responders. The plan was developed in response to requests for fuel in various locations. After a joint meeting with GSA, TSA, DOD, and ESF-12 and 13, a decision was reached to solve problem of fuel supplies for first responders. Six locations were identified to serve as fuel depots strategically located throughout the impact area. There will be 5,000 gallons of gasoline and 5,000 gallons of diesel in each of the six locations, designed to be a gravity feed, retail distribution-type point. The sites were established by DOD to refuel responders working response missions in the impact area. The sites **began operations today** and will remain in operation for a 10-day period. ESF-13 will provide 24-hour security in conjunction with these sites. DOD will coordinate with the TX DOT main point of contact regarding fuel issues.
- The Strategic Petroleum Reserve reports the following assessment of its sites: the Bayou Choctaw site is up and running. There was no damage from the storm. The Bryan Mound site reports no apparent damage. Site is secure. The Bill Hill site received some minor

damage. Roads into the facility are flooded; entry may be possible on Monday. No assessment has been done of the West Hackberry site due to impassable, flooded roads.

- DOE staff have been at the National Response Coordination Center (NRCC) at FEMA HQ, the Interagency Incident Management Team at HQ and the State Emergency Operation Center (EOC) in Louisiana for several weeks. Three staff are in Austin, TX, in preparation for Hurricane Rita. Another is at NORTHCOM, per its request.

OIL AND GAS INFORMATION

- MMS reports today that as a result of damage from Hurricane Katrina and precautionary actions in advance of Hurricane Rita, shut-in oil production in the Gulf is currently at 1,501,863 barrels of oil per day. The shut-in oil production is equivalent to 100 percent of the normal daily oil production in the Gulf, which is currently approximately 1.5 million barrels of oil per day. Shut-in gas production is at 8.047 billion cubic feet per day. This shut-in gas production is equivalent to 80.47 percent of the normal daily gas production in the Gulf, which is currently approximately 10 billion cubic feet per day. These evacuations are equivalent to 81.32 percent of 819 manned platforms and 68.66 percent of 134 rigs currently operating in the Gulf.

▪ **Gulf of Mexico (GOM) Shut-in Oil and Gas**

Date	Percent of GOM Oil Shut-in	Percent of GOM Gas Shut-in
August 30	95.20	87.99
August 31	91.45	83.46
September 1	90.43	78.66
September 2	88.53	72.48
September 3	78.98	57.80
September 4	No data reported	No data reported
September 5	69.57	54.13
September 6	58.02	41.06
September 7	57.37	40.36
September 8	60.12	40.20
September 9	59.88	38.29
September 10	59.84	38.21
September 11	No data reported	No data reported
September 12	57.38	37.84
September 13	56.45	37.20
September 14	56.25	35.18
September 15	56.14	34.11
September 16	56.06	33.84
September 19	55.84	33.75
September 20	58.49	34.82
September 21	73.16	47.13
September 22	91.93	65.95
September 23	99.13	72.04
September 24	100	74.88
September 25	100	80.47

- The Lake Charles Trunkline Liquefied Natural Gas (LNG) facility is shut down, **due to lack of power**.
- The following tables highlight the current shut downs by major energy facilities in the path of Hurricane Rita:

**OIL OPERATIONS IN THE PATH OF HURRICANE RITA
9/25/05, 1200 HOURS**

Refineries

Company	Location	Capacity (B/D)	Status
PORT ARTHUR/ LAKE CHARLES			
Citgo	Lake Charles, LA	324,300	Shut down; minor damaged reported
ConocoPhillips	West Lake, LA	239,400	Shut down
Calcasieu	Lake Charles, LA	30,000	Shut down
ExxonMobil	Beaumont, TX	348,500	Shut down – assessment being made today, no power
Shell (Motiva)	Port Arthur, TX	285,000	Shut down; minor damage to cooling tower, power lines

Company	Location	Capacity (B/D)	Status
Total	Port Arthur, TX	233,500	Shut down
Valero (Premcor)	Port Arthur, TX	255,000	Shut down; "significant damage" to two cooling towers and a flare stack. 2 weeks – 1 month to repair & restart refinery.
Total		1,715,700	
HOUSTON/TEXAS CITY			
Shell Deer Park	Deer Park, TX	333,700	Shut down; assessment finds minimal damage
Lydonell Citgo	Houston, TX	270,200	Shut down
Astra Oil (Crown Central)	Pasadena, TX	100,000	Shut down
Valero	Houston, TX	83,000	Shut down
ExxonMobil	Baytown, TX	557,000	Shut down; readying to restart; delivering gasoline from terminals
BP	Texas City, TX	437,000	Shut down
Valero	Texas City, TX	209,950	Shut down
Marathon	Texas City, TX	72,000	Shut down; assessment finds minimal damage
ConocoPhillips	Sweeny, TX	229,000	Shut down; no damage
Total		2,291,850	
CORPUS CHRISTI			
Flint Hills Resources	Corpus Christi, TX	288,126	Reduced runs, returning to normal
Citgo	Corpus Christi, TX	156,000	OK
Valero	Corpus Christi, TX	142,000	Reduced runs, returning to normal
Trigeant (asphalt)	Corpus Christi, TX	30,000	Reduced runs, returning to normal
Valero	Three Rivers, TX	90,000	Reduced runs, returning to normal
Total		706,126	
TOTAL OF ALL AREAS		4,713,676	Total Shutdown – 4,007,500
Four refineries (3 in LA and 1 in MS) from Hurricane Katrina remain shut down – 879,000 barrels per day			

Sources: Confirmed by company or on company web site. Various trade press sources.

- Several pipelines shut down their systems as a result of Hurricane Rita. The primary reason for the service disruption was the evacuation of personnel and lack of product to transport as refineries in the Texas and Louisiana Gulf Coast area closed. Oil pipeline operators are in the process of getting personnel back to facilities to assess the situation. Once on site, personnel will perform safety inspections to determine if any physical damage has occurred. If no damage is detected, the primary requirement to resume normal operations will be reliable access to the electric grid and access to product to transport.

Pipelines/Ports

Company	Locations	Status
CRUDE PIPELINES		
Seaway Crude Pipeline	4 lines from Texas Gulf to Cushing, OK	Shut down; power available. May restart today.
Capline	St. James, LA to Patoka, IL	Operating at 75 percent of capacity
Sun Pipeline	Nederland, TX terminal	Shutdown; performing assessment
TEPPCO Crude	Texas City to Pasadena, TX	Shutdown; need power.
PRODUCT PIPELINES		
Dixie (propane)	Mt. Belvieu, TX to NC/GA	Shut down
Explorer	LA to OH	Shut down; no damage reported. 24" and 28" lines; 12" line to Dallas operates from tankage until 9/26.
Colonial	Houston, TX	Throughput reduced. Currently 5 pump stations without power. Fully operational east of Krotz Springs, LA.
Longhorn	Houston west to NM/AZ Galena Park terminal (Houston)	Partially shut down Shut down
Centennial System	Beaumont, TX to Creal Springs, IL.	Shut down
Magellan Pipeline	TX/OK	Operational, portions closed
Plantation	Baton Rouge, LA to Washington, DC	Operational – no impact from Rita
TEPPCO	Beaumont, TX to NY	Two main lines shut down – 16" El Dorado, KS line north is operating. No damage to tanks or pipes. Need power.
PORTS		
Louisiana Offshore Oil Port (LOOP)		Power outage; suspended offshore operations
Port of Houston	Houston, TX	Closed – assessments being conducted
Port of Freeport	Freeport, TX	Closed – assessments being conducted
Port Arthur	Port Arthur, TX	Closed
Port of Corpus Christi	Corpus Christi, TX	Shut down – may open late 9/24
Mississippi River		Reopened - Daylight hours only

Sources: Confirmed by company, company web site, or trade associations. Various trade press sources

- A large number of petrochemical plants owned by Dupont, Dow, Union Carbide, ExxonMobil, Lyondell/Equistar, Total Petrochemical, and Chevron have been shut down in preparation for Hurricane Rita. Note: due to the large number of plants, the list will not be displayed in the situation report.
- **The U.S. Coast Guard reports that the Captain of the Port of New Orleans reopened the Lower Mississippi River at 11 a.m. today. Due to the lack of proper Aids to Navigation all**

deep draft vessels are restricted to daylight transits only from the Southwest Pass sea buoy to mile marker 0. The Port Allen Route, Baptiste Collette, and Red River are open. The Gulf Intracoastal Waterway is open from mile marker 20 eastward.

- There are over 60 natural gas plants and processing facilities (not counting pipelines and compressor stations) from New Mexico to Alabama that were in the potential path of Hurricane Rita and most of these shut down as a precaution prior to landfall of Rita. Duke Energy, for example, shut down about 20 facilities in NM, TX, LA, and AL. Duke reports that approximately one-third of its throughput could be affected by the hurricane.
- Other major gas processing companies in the area include Dynegy, El Paso, Enterprises Product Partners, and ExxonMobil.
- Since most Gulf Coast gas production and natural gas processing is shutdown in preparation of Hurricane Rita, most natural gas pipelines in the affected areas are running with losses of supply going into their systems.

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
ANR	20 percent of capacity with reduced supply
Chevron	Western LA facilities shut-in
Columbia Gulf Transmission	Loss of supply
Comstock Offshore	Shut-in since Sept 20
Duke Energy Field Services including CIPCO, Seabreeze and Black Lake	Shut-in
Duke Energy Gas Transmission	9 compressor stations shut-in. The Texas Eastern pipeline is in balance and holding pressure. The Gulfstream natural gas system is operational.
Enbridge Inc.'s Offshore System, which includes Garden Banks, Manta Ray, Nautilus, Stingray, and MS Canyon	No nominations until further notice
Gulf South – Lake Charles	Loss of supply
Kinder Morgan	Loss of supply & damage at Johnson Bayou compressor station – no gas moving downstream from that station; Force Majeure on pipelines in affected areas of TX/LA continues today.
Sabine	Loss of supply
Southern Union's Trunkline Gas	Limited Flow in TX due to loss of supply
Tennessee Gas	20 percent of capacity with reduced supply
Transcontinental Gas	Loss of supply in LA
Williams – station # 44 Johnson Bayou	Unable to get to facility
Florida Gas Transmission	Some compressor stations down- no impact on operations

(Source: Platt's, Company web sites, and DOT, September 25)

ELECTRICITY INFORMATION

STATE OUTAGE DATA

Utility	Customers w/o Power	% Customers w/o Power
Arkansas	30,364	N/A
Louisiana	689,519	41%
Mississippi	13,199	N/A
Texas	775,298	7.7%

- Louisiana data is reported by the Louisiana Public Service Commission and their percentage outage numbers are used in calculating the percentage of total outage.
- Arkansas and Mississippi outages are for Entergy customers only as of 9/24/05 9:30 PM.
- Texas data is from the TX Utility Commission 9/25 Noon CST. Percent customers w/o power are based on EIA estimate of 10.1 million electricity customers in Texas.

STATE REPORTS

Texas

Texas Outage Data by Utilities with Significant Outages

UTILITY	OUTAGES
CenterPoint	299,600
Entergy Gulf States	272,355
TXU	70,000
Sam Houston Coop	50,000
SWEPCO	56,876
TOTAL FOR STATE	775,298

- CenterPoint Energy (CNP) had reported a peak of 715,000 customers outages but that figure is down to 299,600 as of 9/25/05, 8:00AM CDT. The company has begun restoration. Early estimates are that restoration will take up to one week. The company reports 316 circuits and six substations out of service.
- Although CenterPoint Energy crews have been able to bring on large numbers of customers in a short amount of time, some areas have suffered heavier damage, and repairs in these areas may take longer. The majority of outages are concentrated in the following counties: Harris, Chambers, Galveston, Liberty and Montgomery. More than 4,000 utility personnel from across the country, including Kentucky, California and Florida, will join CenterPoint Energy's crews today to assist in restoration work.
- Entergy reports that very preliminary assessments of their electrical system show widespread damage to facilities in southeast Texas and southwest Louisiana. As of 9/25/05 5:30 CDT Entergy has 650,035 customers out of service.

- Utilities in the Gulf Region had been preparing for the arrival of Hurricane Rita. (See earlier Situation Reports on Entergy preparation). CenterPoint Energy reports that in addition to the company's 1,700 field personnel (including 250 contract linemen, 600 contract tree trimmers) the company has 1,400 linemen and 1,000 tree trimmers from around the country to assess damage and assist in the restoration. Several thousand additional utility workers are on stand-by from as far as Canada. The company reports that it has sufficient supplies in inventory to begin restoration efforts and that it has also made arrangements with its vendors and distributors for its post-storm needs.

Louisiana

- In Louisiana, 689,519 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (6:00 AM, 9/25/05 latest report).

Louisiana Outage Data by Utilities with Significant Outages (6:00 AM 9/25/05)

UTILITY	OUTAGES	% customers w/o power
Entergy Gulf	166,875	46%
Entergy Louisiana	107,554	20%
Entergy New Orleans	168,567	82%
CLECO	132,825	50%
Beauregard	36,904	100%
SLEMCO	33,251	39%
DEMCO	11,083	13%
Jefferson Davis	10,000	100%
Wash-St. Tammany	12,762	28%
SLECA	5,649	29%
Pointe Coupee	4,049	41%
Total for state shown includes companies with low percentage outages not shown in the Table	689,519	41%

- As of 9/25/05, Entergy's transmission system currently has 153 lines and 120 substations out of service in Louisiana and Texas, primarily between Lafayette, Louisiana, and New Caney, Texas. Damage assessments will not begin until after the heavy rain ceases. Hundreds of poles, wire spans and transformers have been damaged, with hundreds more lines out of service due to tree damage.
- Entergy has assembled a workforce of 7,000 to support restoration following Hurricane Rita. Crews from outside the region have begun traveling toward the region.
- Entergy has posted a complete list of restoration dates by area in New Orleans at <http://www.entergy.com/corp/EmergencyCtr/restoration.asp>

Florida

- The Florida Reliability Coordinating Council (FRCC) State Capacity Emergency Coordinator is continuing its Generating Capacity "Advisory" throughout the weekend from today, Saturday, September 24, 2005 through Sunday, September 25, 2005. The continuation of this Advisory throughout the weekend is due to the shutting down of the natural gas production facilities in the Gulf of Mexico as a result of Hurricane Rita. The FRCC is continuing its call for public appeals for conservation. The FRCC Region (Peninsular Florida) receives most of its natural gas from these production facilities

¹ Situation Report series for Hurricanes Katrina and Rita have been combined into the Gulf Coast Hurricanes Situation Report series.